

negroes do suffer greatly on many cotton plantations in the middle belt of the southern States; and I have seen no evidences to prove that negroes can in this region become accustomed to the marsh poison, and my observation has been extensive in four States. A question here arises, is there any difference in types of those malarial fevers which originate in the flat tide-water rice-lands and those of the clay hills, or marsh fevers of the interior? I am inclined to think there is.

The following letter is from my friend Dr. Wm. M. Boling, of Montgomery, Alabama, who has had much experience in this region, and who is well known as one of our best medical writers.

MONTGOMERY, Ala., May 17, 1856.

DEAR DOCTOR: Judging from my own observation, I am inclined to believe that there is no such thing as acclimation to miasmatic localities; in other words, that neither residence in a miasmatic locality nor an attack or even repeated attacks of any of the various shades or forms of miasmatic fevers confer any power of resistance to what we understand by the miasmatic poison—not regarding yellow fever, however, as belonging to this class of disease. On the contrary, one attack, it seems to me, instead of incurring an immunity from rather increases the tendency or predisposition to another. It would be no difficult matter, I think, to obtain histories of cases of persons born and continuing to live in miasmatic localities who have been subject to repeated attacks of miasmatic fevers occasionally during the entire course of their lives—say from a few days after birth to a moderate old age—"from the cradle to the grave." We do, to be sure, meet with persons who have resided for a considerable time in miasmatic localities without ever having had an attack of any of the forms of the fever in question. Such instances are more common, if I mistake not, among persons who have removed from a healthy into a miasmatic locality than among such as may have been born and reared in the latter. But it is a rare thing, indeed, according to my observation, to meet with a person residing in a place where miasmatic diseases are rife who has had one attack and no more.

Yours, &c. &c.,

WM. M. BOLING.

The identity or non-identity of yellow and marsh fevers has much to do with the subject of acclimation, but I must refer for my views on this subject to a paper of mine published some twelve months ago in the *New Orleans Medical News and Hospital Gazette*.

ART. III.—*Removal of the Entire Lower Jaw for Osteo-sarcoma.* By GEORGE C. BLACKMAN, M. D., Professor of Surgery in the Medical College of Ohio; Surgeon to the Commercial Hospital, Cincinnati, &c. &c. (With a wood-cut.)

Mrs. V., æt. 60, corpulent, and of excellent general health, consulted me in May last in reference to an affection of the lower jaw, with which she had been troubled for about forty years. Its origin was attributed to an injury inflicted during the extraction of a decayed tooth on the right side. The

swelling extended, at the time of my first visit, from near the external angle of the eye to the opposito ramus of the lower jaw. The mouth was enormously elongated and distorted, as represented in the wood-cut. The tumour extended downwards below the clavicle, and at its lowest point there was an opening some two inches in diameter, through which a bloody matter was discharged in large quantities. For many years the disease was very slow in its progress, but during the past two years the latter had been much more rapid. Of late, she had experienced much difficulty in taking nourishment, and, from the pressure of the enormous mass on the side of her throat, she was often threatened with suffocation. With the exception of the fungous opening already mentioned, the integuments covering the tumour presented a natural appearance. The glands of the neck were free from disease.



I advised an operation, and urged its performance before the commencement of the hot season. She failed, however, to arrange her affairs to come to the city until the latter part of June. At her request, chloroform was administered, or rather a mixture of one part of chloroform and two of sulphuric ether. She was very readily brought under its influence, when I made an incision which commenced just in front of the ear, on a level with the right eye, and extended to the angle on the left side. It passed about an inch and a half below the border of the lower lip, and the commissure was not divided on either side. Another incision was made which included the fungous opening, and the superabundant integument which required removal. The flaps were rapidly dissected, and the bony tumour exposed. The facial arteries bled freely, but were at once controlled by pressure until the ligatures were ready to be applied. With one of Luer's small saws I divided the bone at the left angle, detached the tongue, and disarticulated the right ramus. This was rendered less difficult, as the pressure produced on the condyles by the extension of the tumour beneath the zygoma, caused an absorption of their substance so that they readily separated, and the portions remaining at the articulation were easily extracted with the forceps. As the disease had already invaded the left ramus, this was also removed from the articulation. Retraction of the tongue, which had nearly proved fatal in several of my previous operations on the lower jaw, was guarded against at the very outset of the operation, by passing a strong cord through the organ, which was held by a trusty assistant. In this case, however, there seemed to be no tendency

to any such retraction. The removal of the entire bone was accomplished in about fifteen minutes, and the patient lost not more than six to eight ounces of blood. For an hour after the operation (at 3 P. M.), she seemed greatly prostrated, and until 8 o'clock that evening her pulse continued feeble. Beef-tea, wine, or brandy were regularly administered, at first through a tube, afterwards through the spout of a cup contrived for the purpose. There was no difficulty in swallowing, and her respiration was easy. She passed the night as comfortably as could have been expected, and at 8 o'clock next morning took her nourishment well, and even articulated some words distinctly. At 9 o'clock the heat was intense; no breeze was stirring, and as the sun approached the meridian, the thermometer rose in the patient's chamber to 98°. At 11 o'clock it became evident that her strength was failing, and at 1 o'clock P. M., when the heat had attained its greatest intensity (100° Fabr.) she died without a struggle.

I was assisted in the operation by several of the first physicians of Cincinnati, among whom I may name Drs. Carrol, Fries, Dandridge, Dodge, Foster, Armor, Musser, &c. &c., and I believe all agree in attributing her death to the exhaustion occasioned by the intense heat. Perhaps the anæsthetic likewise exercised a deleterious influence, but how much is due to that, it would be difficult to determine.

The tumour weighed 3½ lbs., and presented all the anatomical characteristics of osteo-sarcoma.

The removal of the entire lower jaw for necrosis has been performed by Perry, of England; Gonwesky, of Westphalia; Maisonneuve, of Paris; Pitha, of Prague, and Heyfelder, of Erlangen; also by McClellan, Carnochan, Mersh, and James R. Wood, of our own country. These cases are of interest, inasmuch as their results furnish us with illustrations of the wonderful reparative powers of nature, but they can hardly be classed with the operations for osteo-sarcoma executed by Professor Syme, Mr. Cusack, of Dublin; Mr. O'Shaughnessy, of India; by Dieffenbach, of Berlin; by Dr. Mott in the case of the negro "Prince;" by Dr. Ackley, of Cleveland, and I think I may add, by myself. In Professor Syme's case of removal of the entire lower jaw, the patient died suddenly the day after the operation, as was supposed, from suffocation produced by the retraction of the tongue. (*Contributions to the Pathology and Practice of Surgery*, p. 21.) Mr. Cusack informed me in June, 1853, that some fifteen years before, he had, for osteo-sarcoma, extirpated the entire bone, and that his patient died a week afterwards, during his absence from town, in a supposed epileptic fit. Dr. Signoroni, of Padua, is reported (*Phil. Med. Exam.*, vol. vii., 1844, p. 96), to have exhibited to the Medical Congress of that city, Sept. 27, 1842, a patient, from whom, by successive operations, he had removed the entire lower jaw affected with osteo-sarcoma. The patient was then in perfect health. Mr. William Helling, Surgeon to the Bristol Infirmary, England, reported in the *Transactions of the Provincial Medical and Surgical Association*, 1833, p. 277, a

case of very extensive osteo-sarcoma of the lower jaw, in which the greater part of that bone was removed, and in this report he makes the following statement: "Mr. Liston, of this city, lately removed the whole lower jaw in a case of this kind; and recovery would certainly have taken place had not an attack of the erysipelatous inflammation, then epidemic, supervened, and proved fatal."

For many years, Walther, of Bonn, has had the credit of having successfully removed the entire lower jaw, and as his claims have been questioned by some surgeons, we insert the following extract from a letter addressed by his nephew, Dr. J. E. Webber, to Dr. Perkins, of New York:—

"Suffice it to say, that I myself am acquainted with eye-witnesses, yet living, who saw the case before the operation, during the operation, and after the operation and subsequent recovery, and there is at this moment in the hands of the eldest son of Walther, a distinguished physician at the capital of Bavaria, a written account, minute in its details, affording a complete history of the case; which report, written by himself, at the request of his father a few days subsequent to the removal of the bone, will be published among the collected papers of Dr. Walther, which his family are about giving to the world."

I have been informed by Dr. Mott, that he has examined an individual who stated that his entire lower jaw had been removed by Mr. Huttan, of Dublin.

The most extraordinary operation on record is unquestionably that reported by Professor Syme, in the *Edinburgh Medical and Surgical Journal*, vol. xxx., 1828, p. 286. The illustrations there given present truly a frightful picture:—

"The mouth was placed diagonally across the face, and had suffered such monstrous distortion as to measure fifteen inches in circumference. The throat of the patient was almost obliterated, there being only about two inches of it above the sternum, so that the cricoid cartilage of the larynx was on a level with that bone. When the tumour was viewed in profile it extended eight inches from the front of the neck. It completely filled the mouth, and occupied all the space below it from jaw to jaw. The tongue was thrust out of its place, and lay between the teeth and cheek of the right side," &c. &c.

The jaw was removed from the right articulation to the left angle, and had a speedy recovery. The tumour weighed 4½ lbs. In the 38th volume of the same journal (1832), Professor Syme states (p. 321) that the patient continued quite well, "masticating and articulating perfectly, and having nothing very disagreeable in his appearance." On the same page he refers to a preparation removed after death by Dr. Martin, of Chatham, in which the mass protruding from the patient's mouth measured at its neck twenty-one inches in circumference, and weighed 3 pounds!

I might notice in detail the successful operations of Cusack, O'Shaughnessy, Ackley, and others, in which nearly the whole bone was removed for osteo-sarcoma; but these are already familiar to the surgeon.

We will only add, that if in the terrible operation performed by Professor Syme, as well as by myself, but a few ounces of blood were lost, surely in operations of less magnitude in this region, the ligation of the primitive carotid must be unnecessary.

I have referred to the cases in which the entire lower jaw has been removed for necrosis, and, in connection with this subject, I would remark that I have in my possession the entire jaw affected with that form of the disease produced by the action of phosphorus among those engaged in the manufacture of lucifer matches. The operation was performed by Dr. Marsh, of Cincinnati, some three years since, at the Infirmary; but the patient survived it only a few months. This case was, therefore, prior to that in the practice of Dr. James R. Wood, which was reported in the May number of the *New York Journal of Medicine*. Dr. Marsh's patient came from Nuremberg, Germany, a place of considerable notoriety in consequence of the prevalence of the phosphorus disease.

ART. IV.—*On the Climate and Salubrity of Fort Moultrie and Sullivan's Island, Charleston Harbour, S. C., with Incidental Remarks on the Yellow Fever of the City of Charleston.* By JOHN B. PORTER, M. D., Surgeon U. S. Army. (*Concluded.*)

1853 was one of the most healthy years known on Sullivan's Island since the conclusion of the war with Mexico. Although diarrhoea was rather common, there was not a single case of cholera infantum at Fort Moultrie during the whole summer—an unusual event—though there were a good many cases of this disease on the island.

Fevers were more prevalent in April and May than in the usual fever months of August, September, and October. The great rains of 1852 had saturated the earth; there was considerable winter rain, and the last half of April, and almost the whole of May, were hot and dry. The action of the hot sun on the porous soil produced disease early in the season.

*Varicella*, owing to the neglect of vaccination, prevailed in Charleston during the winter of 1853-54, but there were no cases on Sullivan's Island. Other eruptive fevers, as measles and scarlatina, were not uncommon in Charleston, but none of them made their appearance on the island. There are a class of acknowledged contagious fevers—smallpox, measles, scarlatina—which are legitimate objects of quarantine. Smallpox was so prevalent in Charleston in 1853 and '54 as to affect the commercial interests. Country merchants and others were afraid to come to the city, yet no attempt was made at quarantine.